US005604999A

United States Patent [19]

Barker

[11] **Patent Number: 5,604,999**

[45] **Date of Patent: Feb. 25, 1997**

[54] **FOOTWEAR WITH ILLUMINATED LINEAR OPTICS**

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[21] Appl. No.: **525,353**

[22] Filed: **Sep. 8, 1995**

Related U.S. Application Data

[62] Division of Ser. No. 237,790, May 4, 1994, Pat. No. 5,502,903.

[51] **Int. Cl.**[6] **A43B 23/00**

[52] **U.S. Cl.** **36/137**; 36/136

[58] **Field of Search** 36/137, 136, 132, 36/2.6; 326/103, 32, 800; 24/713.1

[56] **References Cited**

U.S. PATENT DOCUMENTS

352,064	11/1886	Orne .	
752,433	2/1904	Bagley .	
1,166,495	1/1916	Tizzard .	
1,209,059	12/1916	Smith .	
2,304,367	12/1942	Meyer et al. .	
2,473,877	6/1949	Goldstein .	
2,671,847	3/1954	Lerch .	
3,067,322	12/1962	Sala .	
3,564,232	2/1971	Elberbe .	
3,663,796	5/1972	Hines et al. .	
3,800,133	3/1974	Duval .	
3,893,247	7/1975	Dana, III .	
4,020,572	5/1977	Chiaramonte, Jr. .	
4,128,861	12/1978	Pelengaris .	
4,130,951	12/1978	Powell .	
4,158,922	6/1979	Dana, III .	
4,234,907	11/1980	Daniel .	
4,438,482	3/1984	Leon et al. .	
4,441,483	4/1984	Cleslak et al. .	
4,471,412	9/1984	Mori .	
4,704,660	11/1987	Robbins .	
4,727,603	3/1988	Howard .	
4,848,009	7/1989	Rodgers .	
4,957,347	9/1990	Zarian .	
5,033,212	7/1991	Evanyk .	
5,042,892	8/1991	Chiu et al. .	
5,051,095	9/1991	Slenker .	
5,052,131	10/1991	Rondini .	
5,052,778	10/1991	Jamshid .	
5,067,831	11/1991	Robbins et al. .	
5,122,580	6/1992	Zarian et al. .	
5,149,467	9/1992	Zarian .	
5,149,489	9/1992	Crews .	
5,221,387	6/1993	Robbins et al. .	
5,353,786	10/1994	Wilk .	
5,502,903	4/1996	Barker	36/137

FOREIGN PATENT DOCUMENTS

121026	10/1984	European Pat. Off.	36/137
146353	11/1903	Germany .	
405137604	6/1993	Japan .	
93/11681	6/1993	WIPO	36/137

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[57] **ABSTRACT**

Illuminated footwear having a power source, at least one light source operatively connected to the power source, a switching circuit for selectively illuminating the light source, and a linear side-glow optical conduit positioned exteriorly on the footwear so as to be visible when illuminated, the linear optical conduit having opposed end portions and being capable of emitting light conducted therethrough radially outwardly from its circumferential periphery substantially along its entire length, at least one end portion of the linear optical conduit being positioned and located in close proximity to the light source so as to receive light therefrom when illuminated, the linear optical conduit being illuminated substantially along its entire length when the light source is selectively illuminated. In the preferred embodiment, the linear optical conduit extends substantially around the outer exterior front and side portions of the footwear, although other arrangements are also disclosed herein. An interchangeable filter member may also be positioned between the light source and the one end portion of the linear optical conduit positioned in close proximity thereto, the filter member determining the color of the light directed towards the linear optical conduit end portion. The main features of the present invention are also incorporated into a self-contained portable illumination unit which can be easily attached to and removed from a wide variety of footwear. All embodiments of the present invention are adaptable for use on and with a wide variety of different types and styles of footwear.

15 Claims, 3 Drawing Sheets